

NOTES ON THE FIELD SPARROW IN MICHIGAN

BY LAWRENCE H. WALKINSHAW

Side-hills, covered with blaek-berry bushes, young trees or shrubs, grass grown meadows. pastures and weed-grown fence-rows are the habitat of the Field Sparrow (*Spizella pusilla pusilla*) in Michigan. It has been reported from as far north as Mackinac Island, breeding (4). Barrows mentions no other reliable record north of the Lower Peninsula in Michigan (1). I have never observed the species in the Upper Peninsula but have found it, yet in fewer numbers than both *Spizella pallida* and *Spizella passerina passerina*, in the region of Crawford and Oseoda Counties in the northern part of the Lower Peninsula. In the southern part of the state it is a common bird during the summer months and its plaintive song can be heard from its time of arrival in late March or early April, during daylight hours. until the latter part of August when nesting activities cease.

At Battle Creek migrations have been echecked for several years. The species becomes fairly common during the first half of April when the males can be heard singing from their favorite perches. During Oetober, the Field Sparrow is found in small flocks rather than singly, as in the spring. and these feed in certain favorite areas until they depart. Following is a list of migrations:

Year	First spring arrival	Common	Last of fall
1919	March 22	-----	-----
1920	March 27	-----	-----
1921	March 26	-----	-----
1922	March 27	-----	-----
1924	April 15	-----	-----
1926	April 7	-----	-----
1927	April 9	-----	-----
1929	March 30	April 6	October 13
1930	April 6	April 6	October 12
1931	April 7	April 11	October 25
1932	March 30	April 3	October 16
1933	April 6	April 15	October 22
1934	April 6	April 8	October 27
1935	March 23	April 9	-----

The earliest date of nesting which I have for the Field Sparrow is for a nest found on May 2, 1931, which contained three eggs. The latest nest is one found August 10, 1923. with four eggs from which the young left August 29. In a group of seventy nests observed, nine were found between May 1 and 15; seven during the last half of May; fifteen for the first half of June; nine for the last half; sixteen for the first half of July; five for the last half; and nine for the first half of August.

The nests of the Field Sparrow observed ranged from 5 to 120 cm. above the ground. None of the nests observed, even those placed in grass, clover, or sorrel, were resting on the ground. The majority of the nests were from 15 to 30 cm. up and were usually placed in a small bush or shrub. Sometimes a nest was found along some fence-row or road-side in a small tree some distance from the ground. A favorite spot for nesting is on the dry side-hills covered sparingly with blackberry bushes. In a compact group of these bushes, one can easily locate a flimsy nest of the species, often after the nesting season



FIG. 17. Portrait of a Field Sparrow. July 18, 1935.

has passed. Young oak trees, hazel-nut bushes, cinque foil (*Potentilla*), in fact any type of dense, short vegetation in any open field or on a dry side-hill might be a nesting site of the Field Sparrow.

These nests are made usually of very dry grass stems, roots, and weed stalks, the materials becoming finer as the inside is neared. The lining often contains horsehair, or some other hair, intermixed with very fine grasses. The whole mass varies in width on the exterior from 80 to 100 mm. The inside dimensions vary in the neighborhood of 60x60 mm. in width. Five nests measured 60x62mm., 60x55 mm., 50x50 mm., 62x48 mm., and 60x60 mm. These same nests had a depth of 40, 42, 44, 40, and 38 mm. respectively. The nest is very seldom anchored securely, with the result that many are tipped over during

heavy storms, especially, after the young are a few days old. Usually the nesting materials are merely placed in a natural crotch of one or several branches or stalks. The Field Sparrow does not weave, in or on these in any way, the materials which they bring to the nest.

The eggs have been described (3) as "pale greenish-blue, bluish-white or white, speckled, spotted and penciled with shades of brown, chiefly at the larger end; may be occasionally thickly marked all over, obscuring the ground color." There is a similarity in the color of markings of eggs of the same set but often there is a remarkable difference in color in different sets. The number of eggs varies from two to five. I have three records of complete sets of two eggs (Nos. 6, 9, and 16): eighteen records of sets of three; twenty-one sets of four; and three sets of five.

The measurements of fourteen eggs were 20x13.5, 18.5x13.5, 18.5x13, 18.5x13, 17.5x13, 18.8x14, 17.5x14, 18x13, 18x13, 17x13, 18x13, 17.5x14, 18x13, and 17.5x14 mm., averaging 17.95x13.35 mm. The average weight of eighteen eggs was 1.6 grams. There were, one set of three, averaging 1.76 grams; one set of three averaging 1.33 grams; one set of four, averaging 1.55 grams: one set of four, averaging 1.57 grams; and another set of four, averaging 1.75 grams.

Following is a list of seventy nests which I have observed in Michigan:

No.	Date found	Contents	Location	Outcome	Complete set of eggs
1.	June 14, 1919	5 young	Calhoun Co.	Left nest June 18	5
2.	June 21, 1919	4 eggs	Calhoun Co.	Left nest about July 10	4
3.	May 11, 1920	4 eggs	Calhoun Co.	2 young left May 28	4
4.	May 23, 1920	1 egg	Calhoun Co.	Destroyed	x
5.	June 5, 1920	1 egg	Calhoun Co.	Destroyed	x
6.	June 6, 1920	2 eggs	Calhoun Co.	Destroyed	2
7.	June 6, 1920	4 young	Calhoun Co.	4 young left June 10	4
8.	July 25, 1920	3 eggs	Calhoun Co.	Destroyed	3
9.	Aug. 8, 1920	2 eggs	Calhoun Co.	2 young left Aug. 21	2
10.	Aug. 8, 1920	3 young	Calhoun Co.	3 young left Aug. 14	3
11.	June 1, 1921	4 young	Calhoun Co.	4 young left June 1	4
12.	June 4, 1921	1 young	Calhoun Co.	1 young left June 4	x
13.	July 5, 1921	1 young	Calhoun Co.	1 young left July 5	x
14.	Aug. 12, 1921	2 young	Calhoun Co.	2 young left Aug. 12	x
15.	May 4, 1922	0 eggs	Calhoun Co.	Destroyed	0
16.	May 12, 1922	2 eggs	Calhoun Co.	Destroyed	2
17.	May 17, 1922	1 egg	Calhoun Co.	Destroyed	x
18.	May 18, 1922	2 eggs	Calhoun Co.	Destroyed	x
19.	May 21, 1922	4 eggs	Calhoun Co.	4 young left June 5	4
20.	May 21, 1922	3 eggs	Calhoun Co.	Destroyed	3
21.	Aug. 6, 1922	2 eggs	Calhoun Co.	3 young left Aug. 24	3
22.	June 3, 1923	2 eggs	Calhoun Co.	Unknown	x
23.	June 17, 1923	4 eggs	Calhoun Co.	4 young left June 29	4
24.	July 3, 1923	1 egg	Calhoun Co.	Destroyed	x
25.	July 9, 1923	4 eggs	Calhoun Co.	Destroyed	4

No.	Date found	Contents	Location	Outcome	Complete set of eggs
26.	Aug. 10, 1923	4 eggs	Calhoun Co.	4 young left Aug. 29	4
27.	July 19, 1924	0 eggs	Calhoun Co.	Destroyed	x
28.	July 24, 1924	3 young	Calhoun Co.	3 young left July 31	3
29.	Aug. 10, 1924	3 eggs	Calhoun Co.	Destroyed	3
30.	May 10, 1925	3 eggs	Calhoun Co.	Destroyed	3
31.	June 8, 1927	4 eggs	Calhoun Co.	Destroyed	4
32.	May 13, 1928	4 eggs	Ann Arbor, Washtenaw Co.	Destroyed	4
33.	Aug. 5, 1928	4 eggs	Calhoun Co.	Destroyed	4
34.	Aug. 12, 1928	1 egg	Calhoun Co.	Destroyed	x
35.	June 2, 1929	4 eggs	Washtenaw Co.	Unknown	4
36.	July 13, 1929	3 eggs	Calhoun Co.	Destroyed	3
37.	June 9, 1930	Empty	Calhoun Co.	Destroyed	x
38.	June 14, 1930	3 eggs 1 Cowbirds	Calhoun Co.	Unknown	x
39.	June 21, 1930	3 eggs	Calhoun Co.	Unknown	3
40.	June 22, 1930	4 young	Calhoun Co.	4 young left June 28	4
41.	June 22, 1930	4 young	Calhoun Co.	4 young left June 29	4
42.	June 29, 1930	x young	Calhoun Co.	Unknown	x
43.	July 4, 1930	3 eggs	Ann Arbor, Washtenaw Co.	Unknown	3
44.	July 4, 1930	3 eggs	Wayne Co.	Unknown	3
45.	July 6, 1930	x eggs	Milford, Livingston Co.	Unknown	x
46.	July 10, 1930	2 eggs	Calhoun Co.	Unknown	x
47.	May 2, 1931	3 eggs	Calhoun Co.	Unknown	3
48.	May 13, 1931	4 eggs	Calhoun Co.	Unknown	4
49.	May 15, 1931	5 eggs	Barry Co.	Unknown	5
50.	June 7, 1931	1 young	Barry Co.	1 young left June 8	x
51.	May 22, 1932	4 eggs	Barry Co.	Unknown	4
52.	June 8, 1932	3 eggs	Calhoun Co.	Unknown	3
53.	June 10, 1932	3 young	Calhoun Co.	Unknown	3
54.	July 14, 1932	4 young	Calhoun Co.	Unknown	4
55.	May 14, 1933	5 eggs	Barry Co.	Unknown	5
56.	June 4, 1933	4 young	Calhoun Co.	Unknown	4
57.	June 21, 1933	1 egg	Calhoun Co.	Unknown	x
58.	Aug. 6, 1933	3 young	Barry Co.	Unknown	3
59.	June 25, 1934	1 young 2 eggs	Calhoun Co.	Unknown	3
60.	May 18, 1935	1 egg 3 Cowbirds	Kalamazoo Co.	Unknown	x
61.	June 25, 1935	1 egg 2 Cowbirds	Calhoun Co.	Deserted	x
62.	July 2, 1935	3 eggs	Calhoun Co.	3 young left July 19	3
63.	July 7, 1935	Construct'n	Calhoun Co.	Storm tipped nest over	4
64.	July 11, 1935	1 Cowbird egg	Calhoun Co.	Deserted	x
65.	July 11, 1935	Empty	Calhoun Co.	Unknown	x
66.	July 11, 1935	Empty	Calhoun Co.	Unknown	x
67.	July 11, 1935	2 eggs	Calhoun Co.	2 young left July 29	3
68.	July 12, 1935	1 egg 2 Cowbirds	Calhoun Co.	Destroyed	x
69.	July 22, 1935	4 eggs	Calhoun Co.	Destroyed	4
70.	July 24, 1935	4 eggs	Calhoun Co.	Destroyed	4



Of the seventy nests, forty-six were followed until destroyed, deserted, or until after the young had left the nest. The forty-six nests contained 119 eggs or young for an average of 2.5 per nest. Twenty of these brought off sixty young from sixty-three or more eggs. There were three nests of one young; four of two; four of three; eight of four; and one of five. The Field Sparrow has much better luck than its close relative, the Chipping Sparrow, in this part of Michigan.

Nest No. 6. This nest was only 5 cm. from the ground. It was built in tall grasses in heavy shade of three large black-walnut trees almost in the farm-yard.

Nests Nos. 37, 40, 41, 44, and 59 were in black raspberry bushes.

Nests Nos. 49, 61, 63, 64, 65, 66, and 67 were in black-berry bushes.

Nest No. 62. July 2, 1935, at 7 A. M., three eggs, averaging 1.76 grams per egg in weight. Nest in mass of bushy cinque foil (*Potentilla fruticosa* L.) Nest 15.5 cm. from ground. July 11, 7 A. M. and 6:30 P. M., three eggs; July 12, 6:30 A. M., one egg and two newly hatched young.

WEIGHTS OF YOUNG (Grams)

	July 12 6:30 A.M.	July 14 8:00 A.M.	July 15 8:30 A.M.	July 17 7:30 A.M.	July 18 7:30 A.M.
No. 1	1.85	4.5	8.3	9.8	10.3
No. 2	1.85	4.5	7.9	9.0	9.8
No. 3	xxx	3.1	6.4	7.2	9.3

July 18 young showed fear when handled. Feathers showed several mm. beyond quills, in oldest two. July 19, 6:30 A. M., entered blind which had been erected at nest. Adults fed young several times while I photographed them. Left blind at 8 A. M. Young, two largest, two wing bars, breast was creamy color; maxilla, bluish; mandible, lighter; tomtia, yellow near base, grayed at tip.

The incubation period at this nest was at least eleven days; two young remained in the nest seven days and the younger six. The young hatched over a period of twenty-four hours indicating that incubation commenced one day before the last egg was laid.

Nest No. 63. July 7, 1935, nest about two-thirds completed. July 8, one egg; July 11, noon, four eggs; July 21, three young just hatched, other egg found outside of nest.

WEIGHTS OF YOUNG (Grams)

	July 21 11 A.M.	July 22 6:30 A.M.	July 23 6:30 A.M.	July 24 6:30 A.M.	July 25 A.M.
No. 1	1.55	2.6	4.3	5.55	7.4
No. 2	1.6	2.6	3.8	5.0	6+
No. 3	2.0	Gone	xxx	xxx	xxx

When the nest was visited on July 25 it had been tipped over by a severe rain of the night before and both young were on the ground dead. One had been eaten somewhat by ants.

The nest was built in a large black-berry patch. It was 31 cm. from the ground to the rim. The eggs averaged 1.33 grams each on July 11.

The incubation period was ten days. The young were nearly four days old when killed. Only one parent was observed to feed the young.

Nest No. 67. Found July 11, 1935, two eggs. July 13, 6:30 A. M., four eggs; July 21, 6:30 A. M., four eggs; July 22, 6:30 A. M., one young, three eggs; July 23, 6:30 A. M., three young and one infertile egg.

WEIGHTS OF YOUNG (Grams)

	July 22 6:30 A.M.	July 23 6:30 A.M.	July 24 6:30 A.M.	July 25 2:00 P.M.	July 26 8:00 P.M.	July 28 10:00 A.M.
No. 1	1.9	2.55	3.3	5.8	9.4	10.9
No. 2	xx	2.55	2.9	5.4	Gone	xxx
No. 3	xx	1.1	2.6	4.6	7.3	9.4

The young left the nest July 29 in A. M., when six and seven days old: the incubation period was ten days. The nest was in black-berry bushes on a steep side-hill. It contained much horsehair in the lining and was 290 mm. from the ground to the rim.

Nest No. 68. This was the only nest of the Field Sparrow found containing Cowbird eggs, which was not deserted, but on July 15 at 7 A. M. when it was visited it had been torn from its bush and was scattered about the vicinity.

Nest No. 69. July 22, 1935, 6:30 A. M. and 8 P. M., four eggs; July 23, 7 A. M., two young and two eggs; July 24, 7 A. M., four young; July 31, about 4:30 A. M., eat tipped nest over. How many young were caught is not known.

WEIGHTS OF YOUNG (Grams)

	July 23 7:00 A.M.	July 24 7:00 A.M.	July 25 2:00 P.M.	July 26 8:00 P.M.	July 28 10:00 A.M.	July 30 6:30 A.M.
No. 1	1.9	3.5	5.0	8.6	9.7	10.7
No. 2	2.0	3.5	4.5	7.8	9.4	10.4
No. 3	xx	2.8	4.3	7.8	8.9	9.6
No. 4	xx	1.85	3.3	5.7	8.1	9.4

The average weights of the eggs on July 22 was 1.76 grams. Incubation period not known; nestling period seven and eight days. This nest was located in a red raspberry patch in the garden on my father's farm. It was 71 cm. from the ground to the rim of the nest.

Nest No. 70. This nest was located along the roadside in a small oak and was 120 cm. from the ground. Egg weights averaged 1.75

grams. The nest contained a great deal of horsehair for lining. The outside dimensions were 95x95 mm.: the inside 60x60 mm.

Often the birds are parasitized by the Cowbird (*Molothrus ater*). Some of these nests were not recorded but during 1935 in twelve nests, four contained six Cowbird eggs and only three Field Sparrow eggs. These nests were all deserted, except one.

Blinds were erected at nests 62, 63, and 69. In no case could I be sure that the male helped in feeding the young, the female apparently doing all or nearly all of the home duties while the male sang from some nearby perch. When an intruder approached the nest he, however, came immediately to the nest and scolded as much as she. The young were fed eleven times in nest 63, during a period of two hours, from 9-11 A. M. The food at all three nests was mostly insects. The excreta were swallowed by the female after feeding. Only one of these was eaten at a time. Egg-shells and dead young were removed from the nest and it was usually very tidy even when the young were ready to leave.

The lightest fledgling was a bird of 1.1 grams. Most of them hatched during the night and the following morning weights ranged between 1.55 and 2.0 grams. The young, when they were ready to leave the nest, weighed about 10.5 and 11 grams. Adults weigh only one or two grams more than this (2).

The male Field Sparrow is a very persistent singer. His song has been heard during all of the daylight hours from late March until the first of September and even during autumn migrations in the latter part of October I have heard the song uttered in a half-hearted manner from some member of a feeding flock. During the hot days of late July and August, when nearly all bird voices become quieted during the middle of the day one can feel sure that if he drives to a brush covered field he will hear the song of the Field Sparrow.

Two common songs were observed, "*see-a—see-a—see-a—see-see-see*" and "*see-e—see-e—see-e-see-see-see*". These songs vary, but the songs of one male always seem to be the same monotonous yet attractive notes, over and over all day long. The time of the song is about two seconds by the stop-watch. The usual rate of singing was about four or five times per minute, even during the middle of the day.

The regular alarm note is a rapid chipping, uttered by both parents, while another call, a note of contentment, is a low "*See-see-see-see*". Another call, when the young were in danger, uttered by the parent was "*Che-che-che*", the young freezing immediately. The young called a low "*chip*" when calling for food, after leaving the nest.

## SUMMARY

The Field Sparrow arrives from March 22 to April 15 in the region of Battle Creek and leaves for the south between October 12 and 27. The nesting season extends from May 1 until the last week in August, probably two or more broods being reared in a year. Three and four are the average number of eggs. These average about 1.6 grams in weight. The young weigh about 1.1 grams or a little more when hatching and when ready to leave the nest weight about 10.5 grams. The female does the feeding according to my observations. The young remain in the nest six to eight days.

## REFERENCES

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BATTLE CREEK, MICH.

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RESTORATION OF ROADSIDE COVER BY THE C.C.C.

BY WILLIAM JOHNSTON HOWARD

Much of the roadside beauty of the Illinois prairies has yielded to agriculture and commerce. The bushy hedge row with its diversity of plants and seasonal color changes has been replaced by the prosaic wire fence: highway cuts have hastened erosion and many of the trees have made way for the hot dog stand and the oil station. These newer uses of the roadside have been accompanied by less obvious changes. Grasses which become highly inflammable in dry seasons have supplanted the hedge row. The only recreation the road now affords is down the concrete slab, and wildlife, once a natural part of the fence row, has disappeared. The roadside has become, in many instances, drab and dreary. For the most part it is uninteresting.

East of St. Charles, Illinois, the State Highway Department has acquired rights of way two hundred feet deep and fourteen miles long, upon which was built U. S. Highway 64. A World War veterans company of the Civilian Conservation Corps, under the direction of the U. S. National Park Service, is engaged upon a program of highway beautification and roadside utilization on this strip. Power line poles, bill boards, fences, and structures are being removed. Grading, erosion control, elimination of blind intersections, construction of wayside trails and small bridges, and an extensive planting program are being undertaken by the C.C.C. in an effort to restore the former